

**Unmanned Aerial Systems  
Virtual Ground Control  
Points Using RTK GNSS**

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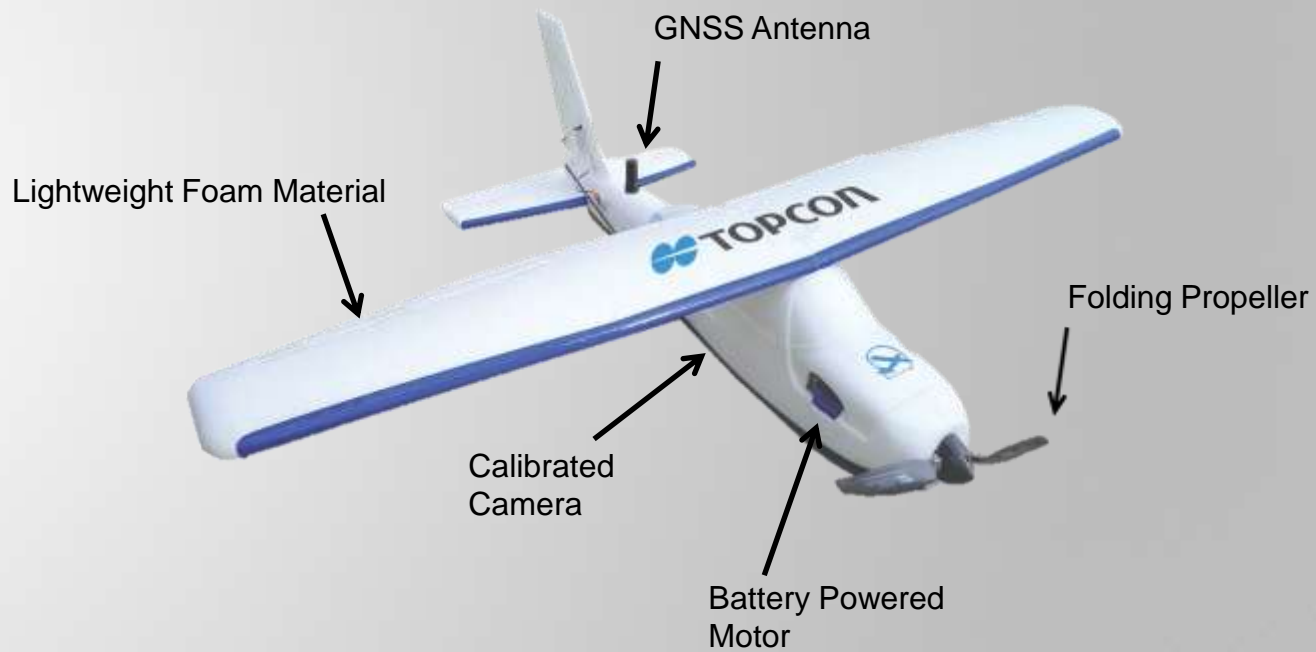
**Director of UAV Operations**

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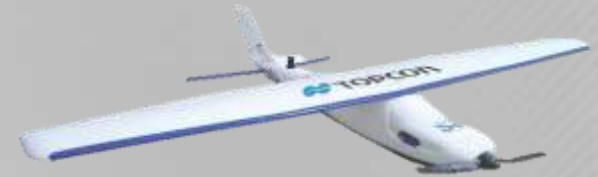
## Why Use Unmanned Aerial System?



# Sirius Pro



## Sirius Pro



### World's First UAS with RTK

- ▶ **High Accuracy Aerial Mapping using GNSS RTK (2 - 5cm)**
- ▶ **No Ground Control Points Required**
- ▶ **High Accuracy in Areas that Cannot be Accessed**







## Workflow

- ▶ **Plan and fly the site.**
- ▶ **Post process images to produce an orthophoto and DEM files.**

This is where most UAS survey companies stop

- ▶ **Extract objects using *Virtual Surveyor***
- ▶ **Build Digital Terrain Model with 3<sup>rd</sup> Party Software**
- ▶ **Export survey and features as *AutoCAD* drawing**

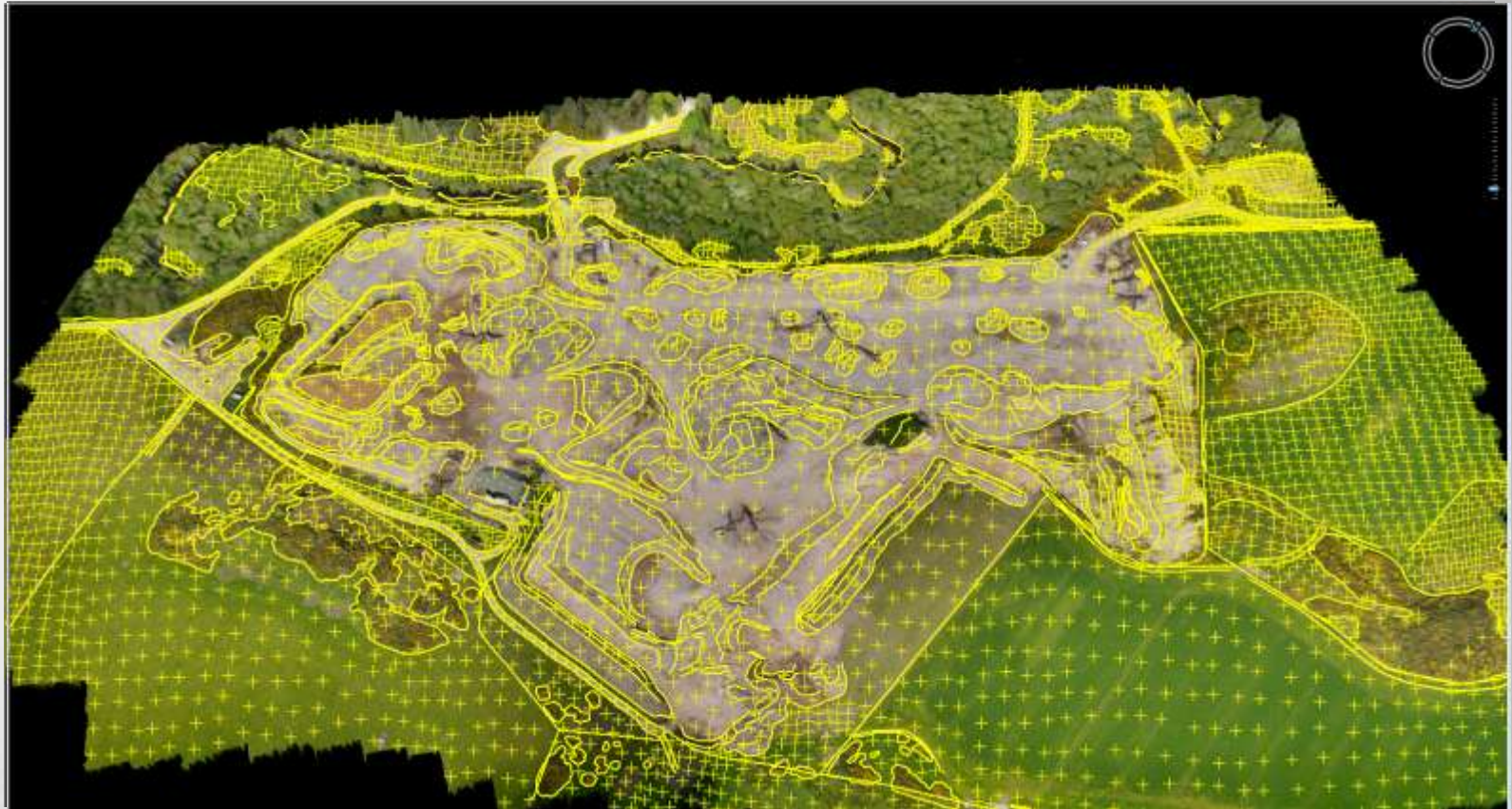


## Acquiring The Data

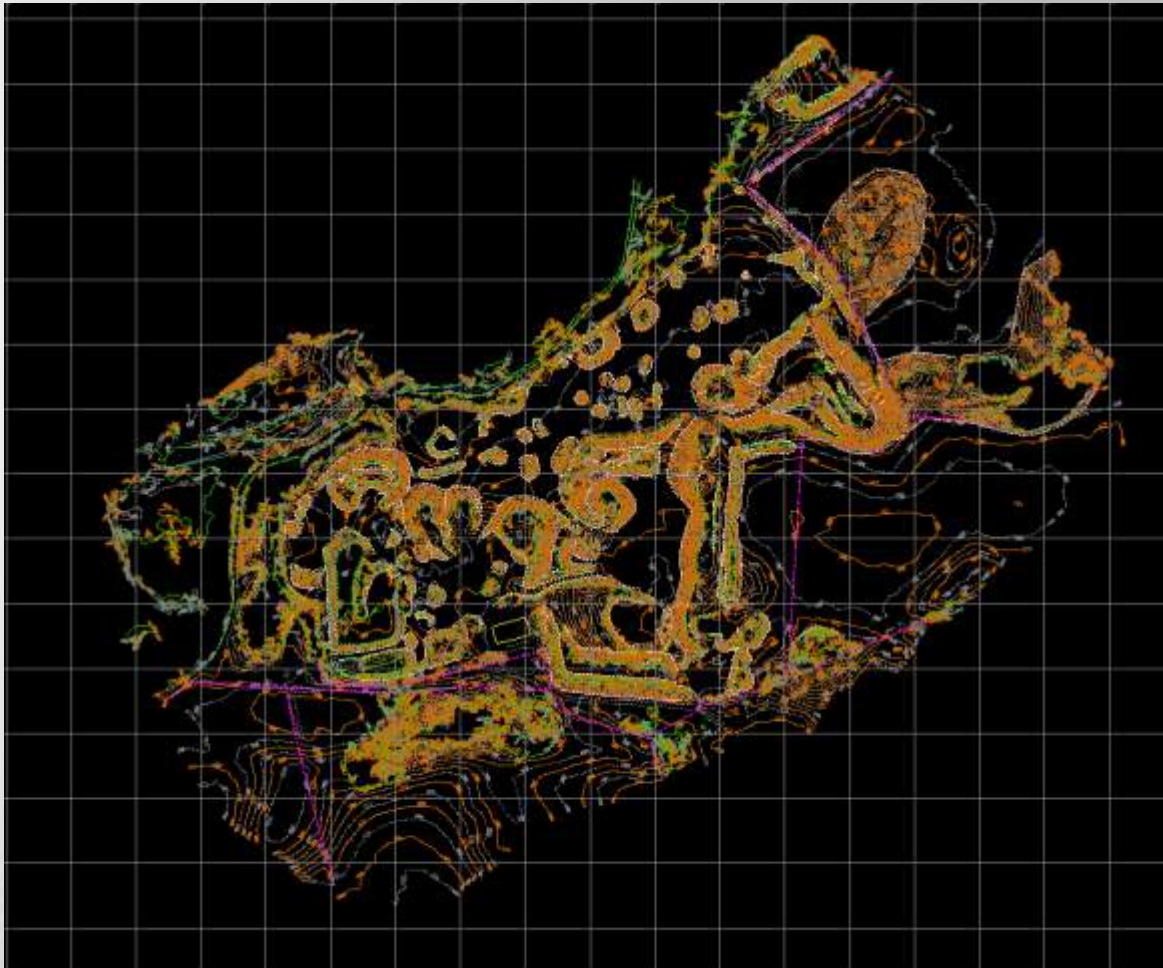




## Virtual Surveyor



## Digital Terrain Model





# AutoCAD



## Additional Services

### Stockpile volumes





## Visualisations

